Joint Fire Science Program

Fire Science First Look

RESEARCH SUPPORTING SOUND DECISIONS

Putting Information into Action

A cornerstone of our science delivery effort is summarizing science information in a format suitable for land managers. This is what the field wants, not scholarly articles gathering dust in the stacks of a library! Delivering research results in the most efficient manner is a new endeavor for the Program. These new synthesis publications will be supported by a rich bibliography that field personnel can use for analysis and planning to meet the requirements of the National Environmental Policy Act (NEPA). The publications will all have the same 'look and feel' and be titled ***"A Summary of Knowledge."***

Based on feedback from our clients about their priorities, we will begin work on the following topics in 2007:

- ***Mortality from prescribed underburning*** - This synthesis will focus on the short-term effects of underburning on the large "legacy" trees that in the long-term are expected to benefit from underburning. Researchers will examine the effectiveness of alternative treatments on the survival of legacy trees during underburning for all species where data are available.

- ***Consequences and opportunities for spring/fall burning*** - Results from the Fire and Fire Surrogate (FFS), a long-term, nationwide study to compare various treatment options, and other studies will be examined to assess the effects and effectiveness of spring burning versus fall burning for fuel reduction. Effects on plants, animals, and ecological processes will be summarized and interpreted where data is available.

- ***Wildfire behavior in treated stands -- what works?*** - This synthesis will examine the effectiveness of fuel treatments in altering fire behavior if and when wildfire occurs on previously treated land. Results from modeling studies such as the FFS and field study sites that have been burned will be integrated and interpreted for this topic.

- ***Environmental effects of fuel reduction treatments*** - The FFS studies will provide the core data to synthesize information regarding the environmental effects of fuel reduction treatments. Environmental effects from fuel treatments are often the subject of public contention, and results from field studies are fragmented. Effects will be interpreted in the context of the magnitude of fuel reduction achieved.

- ***Effectiveness of chipping, mastication, and other mechanical treatments*** – This synthesis will summarize and interpret the effectiveness and effects of mechanical treatments to reduce fuel loading. The scope will include all treatments, ecological effects, and economics where data are available.